

LISTING OF CLAIMS

Claims 1-56 (Canceled)

57. (Previously presented) An in-line system for manufacturing liquid crystal displays, comprising:

a first loading unit;

a substrate-combination unit operatively connected to the first load unit, the substrate-combination unit adapted to receive a first substrate from the first load unit and adapted to receive a second substrate having at least one of a sealant and a liquid crystal material deposited thereon;

an in-line convey unit; and

a substrate-attaching unit adapted to receive the first substrate and the second substrate from the substrate-combination unit via the in-line convey unit and to conjoin the substrates in a vacuum state.

58. (Previously presented) The in-line system of claim 57, wherein the substrate-attaching unit includes two or more vacuum chambers.

59. (Previously presented) The in-line system of claim 58, wherein the vacuum chambers are arranged in series.

60. (Previously presented) The in-line system of claim 58, wherein the vacuum chambers are arranged in parallel.

61. (Previously presented) The in-line system of claim 57, wherein the substrate-attaching unit comprises:

a first compression plate and a second compression plate supporting the two substrates and applying a predetermined force toward each other; and

an exposure unit hardening the sealant.

62. (Previously presented) The in-line system of claim 57, wherein the substrate-attaching unit comprises:

a first compression plate and a second compression plate for supporting the two substrates and applying a predetermined force toward each other, the first compression plate and the second compression plate having at least one vacuum hole for exhausting air from between the compression plates;

a support tube provided between the first compression plate and the second compression plate for sealing a space therebetween, the support tube having an inner space for exhausting air to adjust an interval between the first compression plate and the second compensation plate; and

an exposure unit hardening the sealant.

63. (Previously presented) The in-line system of claim 62, wherein the substrate-attaching unit has a plurality of the vacuum holes at predetermined locations for exhausting in a predetermined sequence.

64. (Previously presented) The in-line system of claim 63, wherein the vacuum holes are formed at corners or a center portion of each side of the first compression plate and the second compression plate.

65. (Previously presented) The in-line system of claim 63, wherein the vacuum holes are slits having a predetermined length.

66. (Previously presented) The in-line system of claim 57, further comprising a liquid crystal depositing unit for depositing the liquid crystal material on the first substrate where the sealant is deposited and a second convey unit which conveys the first substrate to the substrate-combination unit after the first substrate has been processed at the liquid crystal depositing unit.

67. (Previously presented) The in-line system of claim 66, wherein the liquid crystal depositing unit comprises a syringe-type liquid crystal depositer for depositing the liquid crystal material at specific predetermined locations in the liquid crystal cell.

68. (Previously presented) The in-line system of claim 66, wherein the liquid crystal depositing unit comprises a spray type liquid crystal depositer for depositing the liquid crystal material over an entire surface of the liquid crystal cell.

69. (Withdrawn) The in-line system of claim 66, further comprising a sealant heat-treating unit forming a reaction-prevention layer on a surface of the sealant to prevent a reaction between the sealant and the liquid crystal material; and a third in-line convey unit which conveys the first substrate to the liquid crystal depositing unit after the first substrate has been processed at the sealant heat-treating unit.

70. (Withdrawn) The in-line system of claim 69, further comprising a sealant-applying unit depositing the sealant on the first substrate; and a fourth in-line convey unit which conveys the first substrate to the sealant heat-treating unit after the first substrate has been processed at the sealant-applying unit.

71. (Withdrawn) The in-line system of claim 70, wherein the sealant-applying unit deposits the sealant in closed loop without a liquid crystal injection hole.

72. (Withdrawn) The in-line system of claim 57, wherein the sealant is hardened by infrared rays.

73. (Withdrawn) The in-line system of claim 57, wherein the sealant includes one or more buffer regions to allow flow of excess liquid crystal material.

74. (Withdrawn) The in-line system of claim 70, wherein the first loading unit, the sealant-applying unit, the liquid crystal depositing unit, the substrate-combination unit, and the substrate attaching unit are arranged in series.

75. (Withdrawn) The in-line system of claim 70, further comprising a spacer-dispersing unit dispersing spacers on one of the first substrate and the second substrate.

76. (Withdrawn) The in-line system of claim 70, further comprising a spacer dispersing unit dispersing spacers on the first substrate; and a fourth in-line convey unit which conveys the first substrate to the sealant-applying unit after the first substrate is processed at the spacer-dispersing unit.

77. (New) The in-line system of claim 59, wherein the vacuum chambers have different vacuum degrees.